

Abstract of the Disclosure

[0085] The invention provides a use of a material comprising antimony silicate as a sorbent in the removal of metal ions, e.g. radioactive metal ions, from an acidic liquid medium. The metal ions may be selectively removed from amongst other ions such as Na, K, Mg, and Ca ions. Strontium is particularly effectively removable in this way. There is also provided a method of preparing an antimony silicate material for use in removing metal ions. The invention further provides a material comprising antimony silicate doped with one or more elements selected from the group consisting of tungsten, niobium and tantalum. The doped material has been found to be particularly effective as a sorbent in the removal of metal ions from a liquid medium.